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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Simone Bizzarri

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EXAMINER

GEBRESILASSIE, KIBROM K

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,268	Applicant(s) BIZZARRI ET AL.	
	Examiner KIBROM GEBRESILASSIE	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22,24-31 and 33-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22,24-31 and 33-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/28/2010 has been entered.
2. Claims 22, 24-31, and 33-42 are presented for examination.

Response to Arguments

3. Applicant's argument relating to art rejection is not persuasive.
 - a. Applicant's argued the cited references, whether taken alone or in combination, do not teach or suggest the features "selectively associated at least one of the plurality of simulated network users with at least one quality of service profile" as recited in claims 22 and 31.

Examiner respectfully disagrees. Talpade et al discloses map each application to a class of traffic based on the QoS criteria of the application, wherein application may include voice over IP (See: paragraph [0024]). Further, Talpade et al discloses simulate the classes of traffic based on the bandwidth information on links, the traffic source models and QoS criteria provided by the administrator which is associating the services with the network according the input.

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b. Applicant's argued the cited references, whether taken alone or in combination, do not teach or suggest the features "dynamically varying the services to the at least one simulated network user by setting values of different parameters defining the at least one quality of service profile associated with the at least one simulated network user" as recited in claims 22 and 31.

Examiner respectfully disagrees. Talpade et al discloses the ISP administrator allocate one or more resources in network by setting and varying the resources in different simulations such as in the first simulation using router 120 with rate 1.5Mbps and a bucket depth of 20 packets, second simulation a rate of 1.5Mbps and bucket depth of 100 packets, and third simulation a rate of 10.0Mbps and bucket depth of 133 packets (See: paragraph [0038]). Therefore, Talpade et al discloses the user varying the services and setting the parameters according to the invention.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 41 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 41 recites "resulting from the application of the method". It is unclear what "result" are referring to?

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 31, 40, and 42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. As per Claims 31, claim 31 is rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter since the claims merely drawn to computer software per se. The claims do not seem to require any hardware or physical component to perform its function. As such, the claim appears to be system software per se and is therefore non-statutory.

b. As per claims 40, claim 40 is rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter since the claimed invention does not fall within at least one of the four categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter).

c. Claim 42 recites “computer readable medium”. Because the specification does not provide any definition for “medium”, it is believed that the claimed invention intended to claim something broader than a storage medium. The “medium” could comprise tangible and non-tangible mediums. Therefore, the limitation “computer readable medium” is not limited to physical article or objects, which constitute a manufacture within the meaning of 35 USC 101. As such, the claims are not limited to statutory subject matter and therefore are not statutory.

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8. Any dependent claims depend on rejected claims are also rejected because they depend on a rejected claims.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 22, 24-31, and 33-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 2002/0145982 issued to Talpade et al with US Publication No. 2004/0032857 issued to Tannan et al.

- a. As per Claims 1-21 (Cancelled).
- b. As per Claim 22, Talpade et al discloses a method, implemented using a computer system comprising:

a processor and a memory, for simulating a communications network through objects that model respective network devices (See: Fig. 1, system 150), comprising the steps of:

Simulating, using the computer, through said objects the supply of network services to a plurality of simulated network users (See: Fig. 1, network 100) according to respective quality of service profiles (See: paragraph [0021], data entered or received by input device provided to simulator which then simulates the traffic transported through network 100, the output simulator include QoS mechanism and parameter values), wherein the simulating comprising:

Selectively associating, using the computer, at least one of the plurality of simulated network users at least one quality of service profile (See: paragraph [0024], map each application to a class of traffic based on the QoS criteria of the application, application may include voice over IP);

selectively identifying, using the computer, for each of said objects, at least one quality of service profile (See: [0023], identifying the desired class of traffic to be transported by network 100, source model for each class of traffic, and the respective QoS criteria for each class of traffic); and

dynamically configuring said objects, using the computer, to simulate the supply of the service to the at least one of the plurality of simulated network users corresponding to said selectively identified quality of service profile (See: paragraph [0025], simulator then simulate the classes of traffic and determine QoS mechanisms based on the simulation); and

dynamically varying the services to the at least one simulated network user, using the computer, by setting values of different parameters defining the at least one quality of service profile associated with the at least one simulated

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network user (See: paragraph [0038], the ISP administrator may allocate one or more resources in network 100 as follows, first simulation rate of 1.5Mbps and a bucket depth of 20 packets, second simulation rate of 1.5Mbps and a bucket depth of 100 packets which is analogous to varying the service),

wherein the steps are applied for simulating networks (See: paragraph [0025], simulator then simulate the classes of traffic and determine QoS mechanisms based on the simulation).

Talpade et al discloses simulating network (See: paragraph [0021], data entered or received by input device provided to simulator which then simulates the traffic transported through network 100). However, Talpade et al does not expressly disclose whether the simulating network comprising a plurality of mobile terminals cooperating with a blocks or network devices, and wherein the simulated network user comprises one of the plurality of mobile terminals.

Tannan disclose the simulating network comprising a plurality of mobile terminals cooperating with a blocks or network devices, and wherein the simulated network user comprises one of the plurality of mobile terminals (See: Fig. 1 #102, virtual representation is configured to represent a global system for mobile communication "GSM" network 104 comprising nodes and base stations).

It would have been obvious to one of ordinary skill in the art to combine the teaching of Tannan et al with the teaching of Talpade et al because both references drawn to simulate a network that carry a traffic. The motivation to

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include the teaching of Tannan et al with the teaching of Talpade et al would be to achieve a consistent quality of service when transporting data over a network.

c. As per Claim 23, Canceled.

d. As per Claim 24, Talpade et al discloses the method according to claim 22, further comprising the steps of: performing at least one simulation, using the computer, in which every user uses a different service from that used by other users of said plurality (See: paragraph [0021], data entered or received by input device provided to simulator which then simulates the traffic transported through network 100).

e. As per Claim 25, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals, said quality of service profile comprising parameters chosen from the group of: traffic class (See: Fig. 3, traffic class requirement), maximum transfer time of a data unit (See: par [0023], amount of time the traffic is on or off), guaranteed transfer speed for data transmitted by mobile terminal toward the network (See: par [0028], available bandwidth), maximum transfer speed for data transmitted from mobile terminal toward the network (See: par [0028], sufficient bandwidth), guaranteed transfer speed for data transmitted by the network toward a mobile terminal (See: par [0028], available bandwidth), and maximum transfer speed for data transmitted by the network toward a mobile terminal (See: par [0028], sufficient bandwidth).

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f. As per Claim 26, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals connected through radio interfaces, comprising respective control modules of calls, the method comprises the step of directly sending said parameter from said control module of the mobile terminal toward the control module in view of the forwarding of said parameter to modules of the related radio interfaces that start the connection according to the type of service pointed out in said parameter (See: paragraph [0028], paragraph [0030], when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes).

Talpade et al does not expressly disclose a switching centre.

Tannan et al discloses switching centre (See: Fig. 3, circuit switching call generator 302 and packet switched call generator 304).

It would have been obvious to one of ordinary skill in the art to combine the teaching of Tannan et al with the teaching of Talpade et al because both references drawn to simulate a network that carry a traffic. The motivation to include the teaching of Tannan et al with the teaching of Talpade et al would be to vary the packet size based on the application being simulated.

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g. As per Claim 27, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals connected through radio interfaces to a network node, said mobile terminals and said network node comprising respective modules for managing the mobile terminal session and for managing the support node session, the method comprises the step of directly sending said parameter from said module for managing the mobile terminal session toward said module for managing the support node session in view of the forwarding of such parameter to the modules of the related radio interfaces that start the connection according to the type of service pointed out in said parameter (See: paragraph [0028], paragraph [0030], when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes).

Talpade et al does not expressly disclose packet switching call.

Tannan et al discloses packet switching call (See: Fig. 3, circuit switching call generator 302 and packet switched call generator 304).

It would have been obvious to one of ordinary skill in the art to combine the teaching of Tannan et al with the teaching of Talpade et al because both references drawn to simulate a network that carry a traffic The motivation to

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include the teaching of Tannan et al with the teaching of Talpade et al would be to vary the packet size based on the application being simulated.

h. As per Claim 28, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals cooperating with blocks responsible for starting the connection, wherein, in case of simulation of a call originated from a terminal, said parameter is specified by said terminal to said blocks during the procedure for starting the connection (See: paragraph [0028], paragraph [0030], when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes).

i. As per Claim 29, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals cooperating with blocks responsible for starting the connection, wherein, in case of simulation of a terminated call toward a determined network terminal, comprises the step of taking said parameter from the terminal object of the call, said taking step being performed by said blocks responsible for starting the connection (See: paragraph [0028], paragraph [0030], when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for

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connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes).

j. As per Claim 30, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals cooperating with network devices, comprising, in case of simulation of a terminated call on a mobile terminal, the step of sending the indication of connection start beginning from simulated network devices omitting the indication of what quality of service profile to use and obtaining said profile from the mobile terminal to which the call is directed (See: paragraph [0028], paragraph [0030], when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes).

k. As per Claim 31, the instant claims recite substantially same limitation as the above rejected claims 22, and therefore rejected under the same rationale.

l. As per Claim 32, Canceled.

m. As per Claims 33-42, the instant claims recite substantially same limitation as the above rejected claims 24-30, and therefore rejected under the same rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIBROM GEBRESILASSIE whose telephone number is (571)272-8571. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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